UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,203	09/23/2003	Michael P. Wallace	03-247 (US01)	2638

41696 7590 03/05/2009

VISTA IP LAW GROUP LLP
12930 Saratoga Avenue
Suite D-2
Saratoga, CA 95070

EXAMINER	
ROANE, AARON F	

ART UNIT	PAPER NUMBER
3769	

MAIL DATE	DELIVERY MODE
03/05/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/669,203	WALLACE, MICHAEL P.	
	Examiner	Art Unit	
	Aaron Roane	3769	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-14,16,18,19,25,26 and 37-42* is/are pending in the application.

4a) Of the above claim(s) *4,9,14,16 and 26* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,6-8,10-13,18,19,25,37-39,41 and 42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 May 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Reopening of Prosecution After Appeal

In view of the appeal brief filed on 12/02/2008, PROSECUTION IS HEREBY REOPENED. New and additional grounds of rejection has been set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Henry M. Johnson, III/

Supervisory Patent Examiner, Art Unit 3769

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-8, 10-13, 18, 19, 25, 37-39, 41 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Wallace et al. (U.S. Patent 6,280,457).

Regarding claims 1 and 37, Wallace et al. disclose a device comprising: a first material (making up 116, 118 or 120, see col. 5:46 – col. 9:36 in general and col. 8:15-46 in particular and figures 1A-1E) and a bioactive agent (the bioactive agent retained within the "polymeric material" 108, wherein "the polymeric material may be a carrier for various agents, for example, drugs, medicines, growth factors, or genes," see col. 3:60-62 and col. 5:46-64 and figures 1A-1H.). With regarding to the recitations of intended use, language directed to how the device is to be employed and/or functional limitations, the recitations have been treated as such. A recitation of intended use of the claimed invention must be evaluated to determine whether the recited purpose or intended use results in a structural difference (or, in the case of process claims, manipulative

difference) between the claimed invention and the prior art. If so, the recitation serves to limit the claim. However, if a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim. A recitation with respect to the manner in which an apparatus is intended to be employed does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Yanush, 477 F.2d 958, 177 USPQ 705 (CCPA 1973); In re Finsterwalder, 436 F.2d 1028, 168 USPQ 530 (CCPA 1971); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963); Ex parte Masham, 2 USPQ2d 1647 (BdPatApp & Inter 1987). It is well established that a recitation with respect to the manner in which an apparatus is intended to be employed, *i.e.*, a functional limitation, does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963). Where the prior art reference is inherently capable of performing the function described in a functional limitation, such functional limitation does not define the claimed apparatus over such prior art reference, regardless of whether the prior art reference explicitly discusses such capacity for performing the recited function. In re Ludtke, 441 F.2d 660, 169 USPQ 563 (CCPA 1971). In addition, where there is reason to believe that such functional limitation may be an inherent

characteristic of the prior art reference, Applicant is required to prove that the subject matter shown in the prior art reference does not possess the characteristic relied upon. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990); In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138 (Fed. Cir. 1986); In re Ludtke, 441 F.2d at 664, 169 USPQ at 566 (CCPA 1971).

Regarding claims 2, 3 and 6, Wallace et al. disclose a second material (polymer or coating 108, col. 5:46-64 and figures 1A-1H) embedded in the exterior surface of the device and inherently has a glass transition temperature greater than body temperature as it must be used in the body.

Regarding claims 7, 8, 38 and 39, Wallace et al. further disclose the first material (making up 116, 118 or 120, see col. 5:46 – col. 9:36 in general and col. 8:15-46 in particular and figures 1A-1E) being ferrous (containing iron, see col. 8:29-46) and embedded in the device (as it is within the lumen of the device).

Regarding claims 10, 11 and 41, Wallace et al. further disclose a coil (104, see col. 5:46 – col. 7:48) forming a lumen, and a heating member (making up 116, 118 or 120, see col. 5:46 – col. 9:36 in general and col. 8:15-46 in particular and figures 1A-1E) disposed in the lumen, the heating member at least partially comprising the first material , in the form of a filament attached to first and second locations of the coil.

Regarding claims 12 and 13, Wallace et al. disclose a second material (polymer of coating 108, col. 5:46-64 and figures 1A-1H) embedded in the exterior surface of the device and inherently has a glass temperature greater than body temperature as it must be used in the body.

Regarding claim 18, Wallace et al. disclose a helically wound coil (104, see col. 5:46 – col. 7:48) comprising a highly conductive material and forming a lumen; a filament (making up 116, 118 or 120, see col. 5:46 – col. 9:36 in general and col. 8:15-46 in particular and figures 1A-1E) at least partially positioned in the lumen, the filament comprising a ferrous material; and a bioactive agent (the bioactive agent retained within the "polymeric material" 108, wherein "the polymeric material may be a carrier for various agents, for example, drugs, medicines, growth factors, or genes," see col. 3:60-62 and col. 5:46-64 and figures 1A-1H). With regarding to the recitations of intended use, language directed to how the device is to be employed and/or functional limitations, the recitations have been treated as such. A recitation of intended use of the claimed invention must be evaluated to determine whether the recited purpose or intended use results in a structural difference (or, in the case of process claims, manipulative difference) between the claimed invention and the prior art. If so, the recitation serves to limit the claim. However, if a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim. A recitation with respect to the manner in which an apparatus is intended to be employed does not impose any structural

limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Yanush, 477 F.2d 958, 177 USPQ 705 (CCPA 1973); In re Finsterwalder, 436 F.2d 1028, 168 USPQ 530 (CCPA 1971); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963); Ex parte Masham, 2 USPQ2d 1647 (BdPatApp & Inter 1987). It is well established that a recitation with respect to the manner in which an apparatus is intended to be employed, *i.e.*, a functional limitation, does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963). Where the prior art reference is inherently capable of performing the function described in a functional limitation, such functional limitation does not define the claimed apparatus over such prior art reference, regardless of whether the prior art reference explicitly discusses such capacity for performing the recited function. In re Ludtke, 441 F.2d 660, 169 USPQ 563 (CCPA 1971). In addition, where there is reason to believe that such functional limitation may be an inherent characteristic of the prior art reference, Applicant is required to prove that the subject matter shown in the prior art reference does not possess the characteristic relied upon. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990); In re King, 801 F.2d 1324,

1327, 231 USPQ 136, 138 (Fed. Cir. 1986); In re Ludtke, 441 F.2d at 664, 169 USPQ at 566 (CCPA 1971).

Regarding claim 19, Wallace et al. further disclose the highly conductive material comprising platinum, see col. 6:8-24.

Regarding claim 25, Wallace et al. further disclose the ferrous material is embedded in the filament (116, 118 or 120 being ferrous (containing iron, see col. 8:29-46), see col. 5:46 – col. 9:36 in general and col. 8:15-46 in particular and figures 1A-1E).

Regarding claim 42, Wallace et al. disclose a device comprising a first material (making up 116, 118 or 120, see col. 5:46 – col. 9:36 in general and col. 8:15-46 in particular and figures 1A-1E) and being ferrous (containing iron, see col. 8:29-46); and a second material (polymer of coating 108, col. 5:46-64 and figures 1A-1H) embedded in the exterior surface of the device and inherently has a glass temperature greater than body temperature as it must be used in the body. With regarding to the recitations of intended use, language directed to how the device is to be employed and/or functional limitations, the recitations have been treated as such. A recitation of intended use of the claimed invention must be evaluated to determine whether the recited purpose or intended use results in a structural difference (or, in the case of process claims, manipulative difference) between the claimed invention and the prior art. If so, the recitation serves to

limit the claim. However, if a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim. A recitation with respect to the manner in which an apparatus is intended to be employed does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Yanush, 477 F.2d 958, 177 USPQ 705 (CCPA 1973); In re Finsterwalder, 436 F.2d 1028, 168 USPQ 530 (CCPA 1971); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963); Ex parte Masham, 2 USPQ2d 1647 (BdPatApp & Inter 1987). It is well established that a recitation with respect to the manner in which an apparatus is intended to be employed, *i.e.*, a functional limitation, does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963). Where the prior art reference is inherently capable of performing the function described in a functional limitation, such functional limitation does not define the claimed apparatus over such prior art reference, regardless of whether the prior art reference explicitly discusses such capacity for performing the recited function. In re Ludtke, 441 F.2d 660, 169 USPQ 563 (CCPA 1971). In addition, where there is reason to believe that such functional limitation may be an inherent characteristic of the prior art reference, Applicant is required to prove that the subject

matter shown in the prior art reference does not possess the characteristic relied upon. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990); In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138 (Fed. Cir. 1986); In re Ludtke, 441 F.2d at 664, 169 USPQ at 566 (CCPA 1971).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 6-8, 10-13, 18, 19, 25,37-39, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ken et al. (USPN 5,853,418) in view Günther et al. (USPN 6,238,421) and in further view of Wallace et al. (USPN 6,280,457) in still further view of Engelson (USPN 6,024,754).

Regarding claims 1, 6, 10, 11, 18, 19, 25, 37, 39, 41 and 42 Ken et al. disclose a vaso-occlusive device for treating a site within a patient's vasculature, the device comprising a

helically wound coil (coiled formed by 102 and its analogous counterparts in the other embodiments) forming a lumen and formed of platinum (see col. 4, lines 47-60), a filament/heating member (first material) (108, 208 and 214 and their analogous counterparts in the other embodiments) disposed in the lumen, the heating member at least partially comprising a first highly resistive, ferrous material (contains iron), the first material that is embedded within the device and which may be heated by application of a source of energy external to a patient's body after the device is implanted at a treatment site in the patient's body, see col. 1-9, particularly col. 4, line 6 through col. 5, line 10 and figures 1A-11D. Ken et al. fail to disclose the device may be heated by an energy emitting element external to the patient. Ken et al. also fail to disclose a bioactive agent that is activated or released when the device is heated. Günther et al. disclose an induction heating device and method for metallic implants in the living beings and teach using "a conducting coil and an RF generator are used in the present invention to heat a metallic implant inductively from outside the body" in order to treat aneurysms, see col. 2, line 44 through col. 5, lines 37. Wallace et al. also disclose a vaso-occlusive coil device and teach that "the polymeric fibers covering the device are used as a carrier for bioactive molecules". Non-limiting examples of bioactive materials which increase cell attachment and/or thrombogenicity include both natural and synthetic compounds, e.g., collagen, fibrinogen, vitronectin, other plasma proteins, growth factors (e.g., vascular endothelial growth factor, "VEGF"), synthetic peptides of these and other proteins having attached RGD (arginine-glycine-aspartic acid) residues, generally at one or both termini.

In addition, polynucleotide sequences encoding peptides (e.g., genes) involved in wound healing or promoting cellular attachment may also be used, see col. 12, lines 3-14. Engelson discloses an aneurysm closure coil device and method and teaches providing the coil device (240) with a "coating of polymeric composition" that upon heating melts and comes off the coil, and once heat is removed the polymeric material "can be coalesced, reformed, or solidified in the vasculature" in order to enhance the treatment of aneurysm, see col. 2, line 66 through col. 3, line 32 and col. 4-10, particularly col. 9, line 25 through col. 10, line 5 and figures 1- 12C, particularly figures 12A-12C. Once the polymeric coating is heated and melts away from or off of the coil (Engelson) the bioactive agent is released (Wallace et al.). Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the invention of Ken et al., as taught by Günther et al. et al., to provide heating energy from outside/external source as an alternate means of heating the implantable metallic coil, and as further taught by Wallace et al., to provide the coil with a polymeric coating having a bioactive agent in order to improve the vaso-occlusion treatment, and still as further taught by Engelson, to provide the coil with a polymeric coating that is released from the coil upon heating in order to further enhance the treatment of aneurysms.

Regarding claims 2, 3, 12 and 13, Ken et al. in view Günther et al. and in further view of Wallace et al. and still in further view of Engelson disclose the claimed invention, see the polymeric material coating of Engelson (entire reference).

Regarding claims 7 and 38, Ken et al. in view Günther et al. and in further view of Wallace et al. and still in further view of Engelson disclose the claimed invention.

Regarding claim 8, Ken et al. in view Günther et al. and in further view of Wallace et al. and still in further view of Engelson disclose the claimed invention. It can be clearly seen that (108 and all analogous counterparts in other embodiments) of Ken et al. is embedded in the element, see figures 1A-10.

Regarding claim 30, Ken et al. in view Günther et al. and in further view of Wallace et al. and still in further view of Engelson disclose the claimed invention.

Regarding claim 34, Ken et al. disclose the claimed invention, see col. 1-9, particularly col. 4, line 6 through col. 5, line 10 and figures 1A-11D.

Response to Arguments

As a new and additional grounds of rejection has been included in this office action (which reopens prosecution) to further reject the presently claimed invention, any and all arguments/remarks by Applicant made in the submission filed 12/2/2008 are moot. Applicant's arguments/remarks with respect to the obviousness 103 rejections of claims 1-3, 6-8, 10-13, 18, 19, 25, 37-39, 41 and 42 made previously will be addressed after some initial comments by the

examiner regarding the recitations of intended use, language directed to how the device is to be employed and/or functional limitations in all of the independent claims (and some of the dependent claims).

In order to be very clear as to what recitations the examiner views as intended use, language directed to how the device is to be employed and/or functional limitations, the examiner will note the positive recitations in normal type and highlight the intended use, language directed to how the device is to be employed and/or functional limitations recitations in ***bold italics*** below.

Claim 1 recites:

a) a first material which, ***if the device has been detached from a delivery catheter and deployed at a treatment site in the patient's vasculature, may be heated by application of energy transmitted by an energy emitting element located external to the patient;***

b) a bioactive agent that***, if the device is detached from a delivery catheter and implanted at a treatment site in the patient's vasculature, is released from the device upon heating of the device by application of said pulsed magnetic field.***

Claim 18 recites:

a) a helically wound coil comprising a highly conductive material and forming a lumen; a filament at least partially positioned in the lumen, the filament comprising a ferrous material, such that, if the device is detached from a delivery catheter and implanted at a treatment site in

the patient's vasculature and exposed to a pulsed magnetic field applied from an energy emitting element located outside the body, the ferrous material is heated; and

b) a filament at least partially positioned in the lumen, the filament comprising a ferrous material, such that, ***if the device has been detached from a delivery catheter and deployed at a treatment site in the patient's vasculature, may be heated by application of energy transmitted by an energy emitting element located external to the patient;***

c) a bioactive agent that, ***if the device is detached from a delivery catheter and implanted at a treatment site in the patient's vasculature, is released from the device upon heating of the device by application of said pulsed magnetic field.***

Claim 35 recites:

a) a first material which, ***if the device has been detached from a delivery catheter and deployed at a treatment site in the patient's vasculature, may be heated by application of energy transmitted by an energy emitting element located external to the patient;***

b) a bioactive agent that, ***if the device is detached from a delivery catheter and implanted at a treatment site in the patient's vasculature, is activated upon heating of the device by application of energy transmitted by said external energy emitting element to heat the first material.***

And claim 42 recites:

a) a first material which***, if the device has been detached from a delivery catheter and deployed at a treatment site in the patient's vasculature, may be heated by application of energy transmitted by an energy emitting element located external to the patient;*** and

b) a second material having a melting or glass transition temperature greater than body temperature, but less than a temperature reached by the device ***if the first material is heated by energy transmitted by the external energy emitting element,***

c) wherein the second material is embedded in one or more portions of the device, such that, ***if the device is detached from a delivery catheter and implanted at the treatment site when heated by energy transmitted by the external energy emitting element, and thereafter allowed to cool at the treatment site, the one or more portions are at least partially melted and fused together to thereby stabilize the vaso-occlusive device in a deployed configuration.***

Again and as noted in the above 102 anticipation rejections, the recitations of intended use, language directed to how the device is to be employed and/or functional limitations, the recitations have been treated in accord with normal practice. That is, a recitation of intended use of the claimed invention must be evaluated to determine whether the recited purpose or intended use results in a structural difference (or, in the case of process claims, manipulative difference) between the claimed invention and the prior art. If so, the recitation serves to limit the claim. However, if a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim. A recitation with respect to the manner in which an apparatus is intended to be employed does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim.

In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Yanush, 477 F.2d 958, 177 USPQ 705 (CCPA 1973); In re Finsterwalder, 436 F.2d 1028, 168 USPQ 530 (CCPA 1971); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963); Ex parte Masham, 2 USPQ2d 1647 (BdPatApp & Inter 1987). It is well established that a recitation with respect to the manner in which an apparatus is intended to be employed, *i.e.*, a functional limitation, does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963). Where the prior art reference is inherently capable of performing the function described in a functional limitation, such functional limitation does not define the claimed apparatus over such prior art reference, regardless of whether the prior art reference explicitly discusses such capacity for performing the recited function. In re Ludtke, 441 F.2d 660, 169 USPQ 563 (CCPA 1971). In addition, where there is reason to believe that such functional limitation may be an inherent characteristic of the prior art reference, Applicant is required to prove that the subject matter shown in the prior art reference does not possess the characteristic relied upon. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990); In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138 (Fed. Cir. 1986); In re Ludtke, 441 F.2d at 664, 169 USPQ at 566 (CCPA 1971).

Additionally, Applicant is not claiming an external energy source.

Raging Applicant's arguments/remarks against the presently and previously obviousness 103 rejections, the examiner will address each argument/remark in turn.

Beginning on page 7, 2nd full paragraph through page 8, 3rd full paragraph, the examiner would like to make clear the test of obviousness used in the present and past Office actions. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. In re Keller, 642 F. 2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In this regard, a conclusion of obviousness may be based on common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference. In re Bozek, 416 F .2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

Applicant remarks that four separate references are used in the obviousness 103 rejections, see page 8, 1st two lines of last paragraph. In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991). Additionally, all the references are analogous/related.

On page 9, 2nd full paragraph, Applicant asserts that the obviousness "statement disregards key aspects of the actual disclosures of the references being combined. Further, the teachings of these references are not properly combinable to achieve the claimed inventions, and

even if these four references could somehow be properly combined, their combination still does not achieve the elements required by the claims." First, the rejections show/illustrate the commonalities of the references as well provide rationale for combining the references supported by column, line(s) and/or figures within the given reference(s). Even if Applicant was able to positively recite the above noted recitations of intended use, language directed to how the device is to be employed and/or functional limitations, the combined references read on the presently claimed invention's intentions as set forth by the claim language.

On page 10, last paragraph, 1st two lines, Applicant asserts that the examiner's position that the modest amounts of iron (as disclosed by Ken et al.) in the filaments heat up in a alternating magnetic field is "mere supposition." The examiner disagrees strongly and Applicant is directed to the concept of heat generated by hysteresis (losses), which is an extremely well known and established scientific fact. Essentially, and for the present issue, it is among other things the phenomenon of how an iron object generates heat when exposed to an alternating magnetic field.

Applicant's arguments/remarks beginning on page 10, 1st full paragraph up to and including page 13, 1st paragraph, are attacks against the references individually and not on what the references teach one of ordinary skill in the art as a whole. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In regard to Applicant's argument/remark against the rejection of claim 42 and specifically with regards to the second material embedded in the device. The polymeric cover/coating 108 disclosed by Ken et al. is certainly embedded in the device as the cover/coating is part of the device and therefore the second material which is the polymeric material is embedded in a portion of the surface and below of the device.

In the last paragraph on page 14, Applicant states "the Office Action does not identify an articulated reason or set forth an adequate basis that would have prompted a person of ordinary skill in the relevant field to combine the teachings of Ken, Günther, Wallace and Engelson in an effort to achieve the limitations of claim 42. Further, the Office Action fails to consider all the limitations of claim 42." As shown in the above rebuttal this is incorrect, as the obviousness rejections contain rationale for the combination and all the limitations (even those limitations which are implied and not positively recited) are considered.

As this action includes new and additional grounds of rejection, this action is made non-final.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Roane whose telephone number is (571) 272-4771. The examiner can normally be reached on Monday-Thursday 8:30AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Johnson can be reached on (571) 272-4768. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron Roane/
Examiner, Art Unit 3769

/Henry M. Johnson, III/
Supervisory Patent Examiner, Art Unit 3769